

Rethinking College Readiness

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Assistant Commissioner for Academic Affairs**

**Default Prevention Day
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HB 1042 (2012)

- RSMo 173.005.2 (6) “The coordinating board for higher education shall require all public two-year and four-year higher education institutions **to replicate best practices in remediation . . . and identify and reduce methods that have been found to be ineffective in preparing or retaining students or that delay students from enrollment in college-level courses**”

Principles of Best Practice in Remedial Education

- Policy umbrella under which institutions can meet students' needs
 - Alignment of high school and college curriculum and expectations
 - Early (prior to 10th grade) assessment of basic skills
 - Seamless transition from remedial to college-level coursework.
 - Assess the basic skills of all certificate- or degree seeking students
 - Accurate placement using multiple measures
 - Help students complete gateway courses as quickly as possible.
 - *Gateway courses should align with academic course of study*
 - Alternate delivery methods to move students into credit bearing courses as quickly as possible
 - Self-paced, mastery-based routes for severely underprepared students

6.0 CBHE Recommended College Preparatory High School Curriculum

CBHE Recommended College Preparatory High School Curriculum

English/Language Arts - 4 units

Social Studies - 3 units

Mathematics - 4 units*

Science - 3 units

Fine Arts - 1 unit

Additional Coursework - 3 units **

Electives - 6 units ***

*At least one mathematics course should be taken each year., especially grade 12.

Readiness Defined

- College readiness
 - content knowledge; maturity; self-discipline; perseverance; habits of mind such as problem solving, and the ability to observe, listen, and speak
- College-content readiness
 - Level of preparation/knowledge required, without the need for remediation, to complete entry-level courses at a level of understanding and proficiency that prepares the student for subsequent courses
- Career Readiness
 - Level of preparation to proceed to the next step in a chosen career

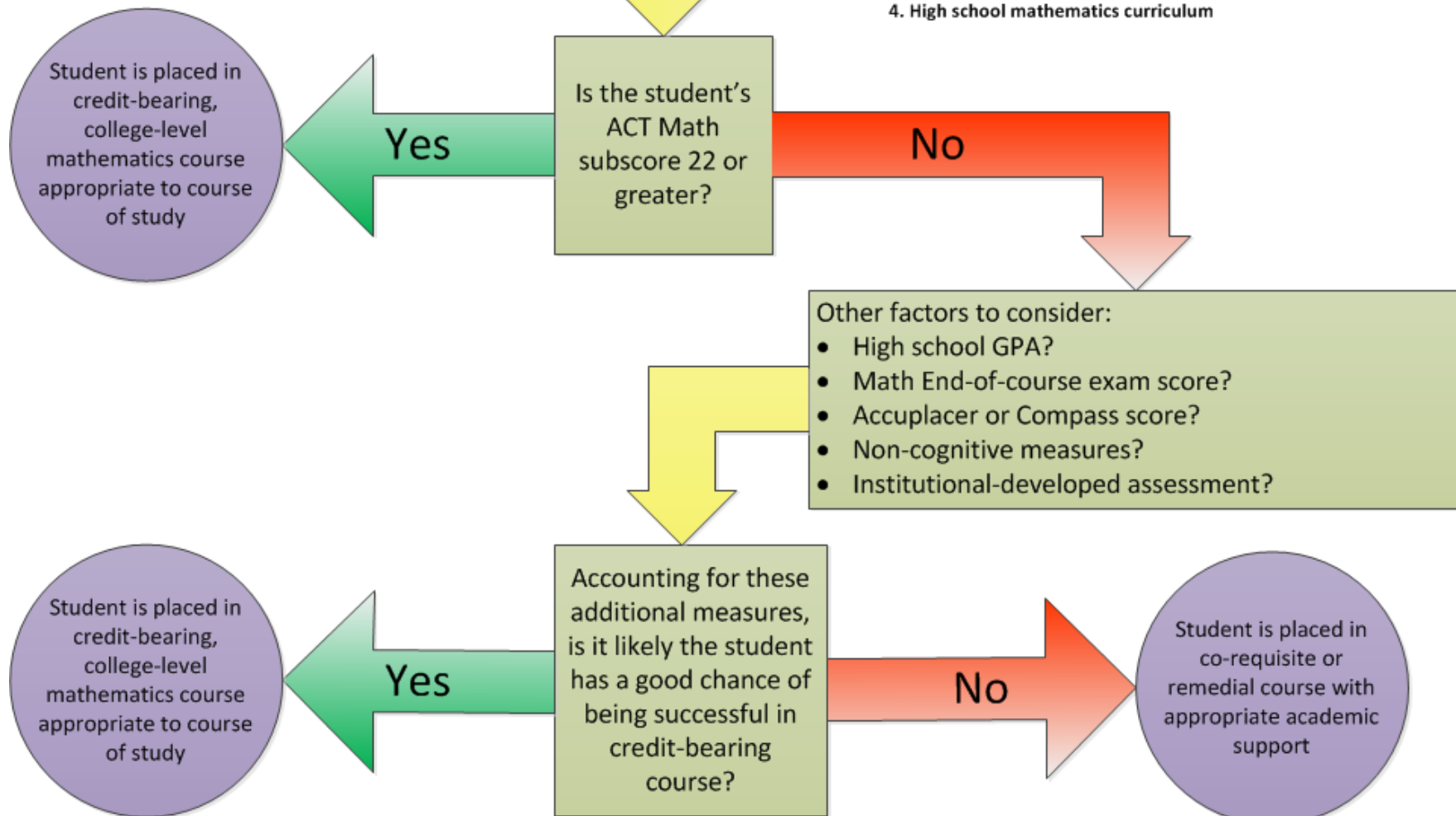
How to Measure Readiness?

- Standardized tests (Compass, ACT) are blunt instruments
 - General predictor of success,
 - not identify precise skills students lack.
- Many students placed in remedial courses could succeed in credit-bearing courses
- Need better diagnostic tools to place students

Show-Me College Mathematics Placement Process

Metrics used to place students in appropriate mathematics course:

1. ACT math subscore
2. High school GPA
3. Mathematics EOC
4. High school mathematics curriculum



Missouri Mathematics Pathways Task Force (MMPT)

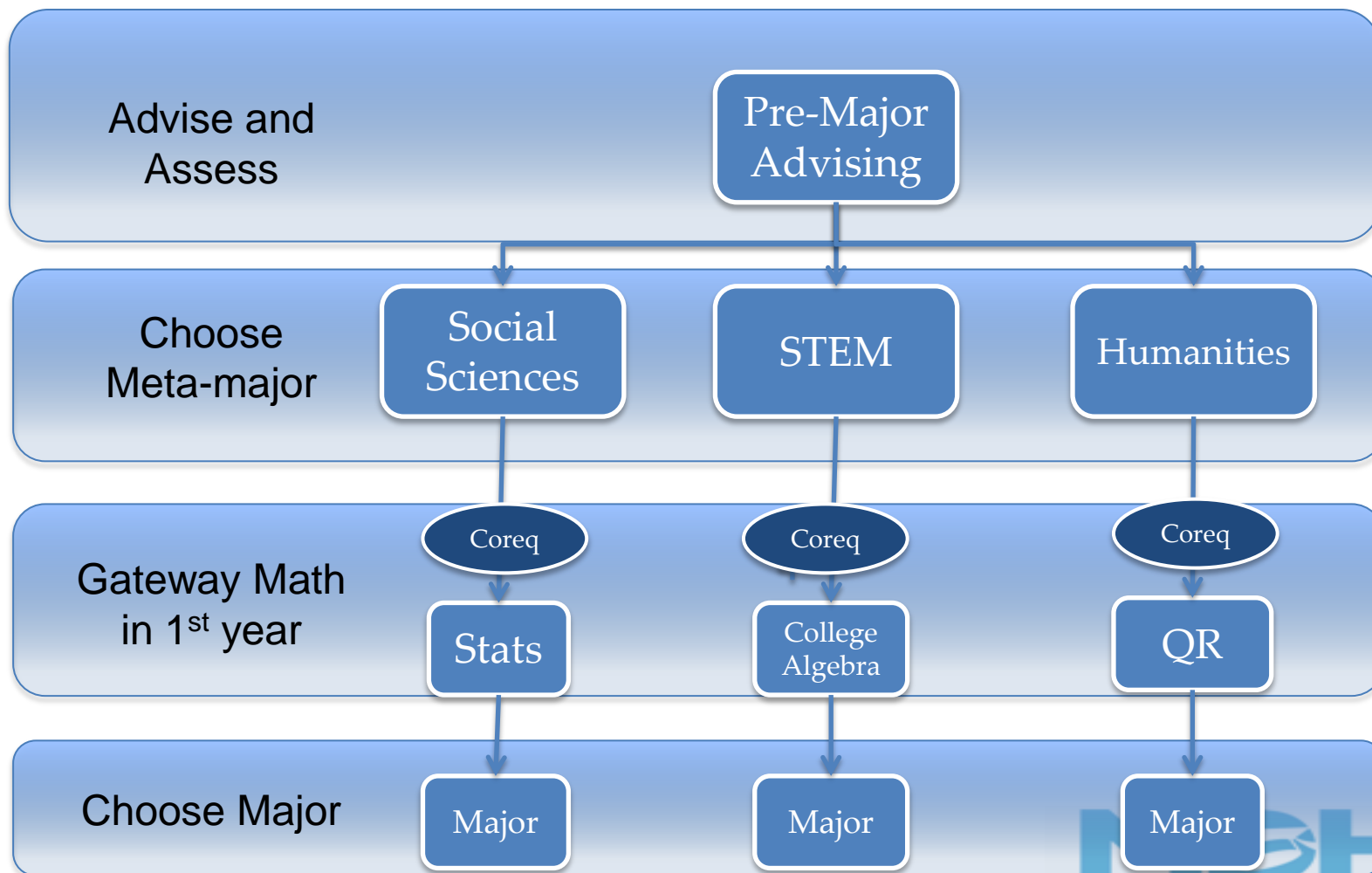
- Explore alternative mathematics pathways and the necessary course redesign
 - Not dumbing down the curriculum.
 - Not merely preparing students for careers
 - Not forsaking educating students.
 - Not making change for the sake of change.

What are Math Pathways?

- Differentiated gateway math courses: instruction in math skills needed for success in program of study.
 - *STEM*
 - *Transfer, Non-STEM*
 - *Non-Transfer*
- Outlined in an academic map; included in degree plans for students.
- Fully articulated for transfer into programs of study
 - not simply for general education credit.
- Academic support for skills essential for gateway course in program of study.
- Gateway course math content as a co-requisite
 - Allows students to complete a gateway math course in one academic year.
- Support to make well-informed decisions about academic and career goals
- Advising for correct placement



A Model Pathway

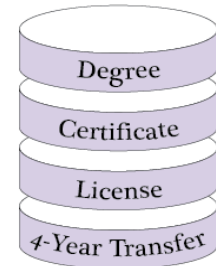
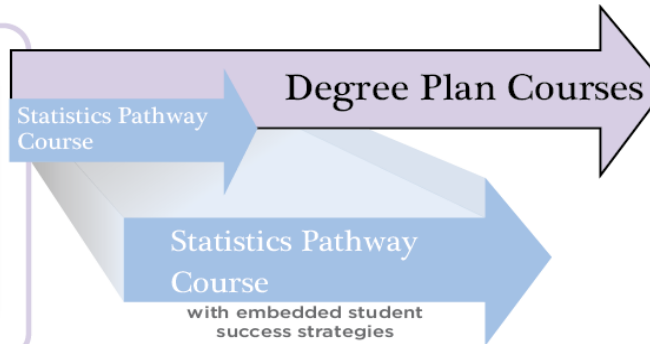


Three Pathways To-and-Through College Transferable Courses

The New Mathways Project

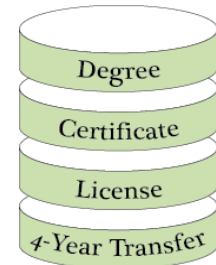
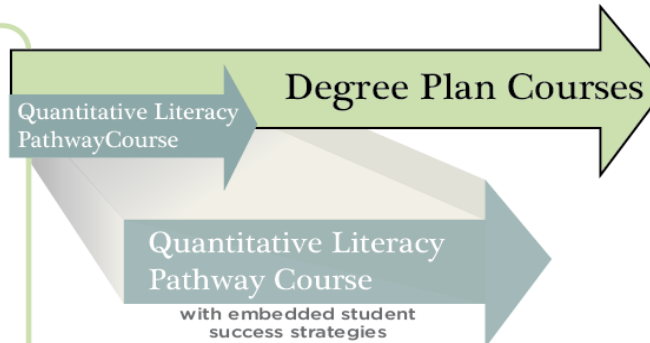
STATISTICS PATHWAY is designed for students seeking a college-level statistics course as part of their general education requirement for majors in fields including:

- Nursing
- Social Work
- Criminal Justice



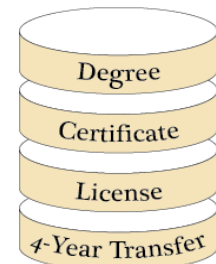
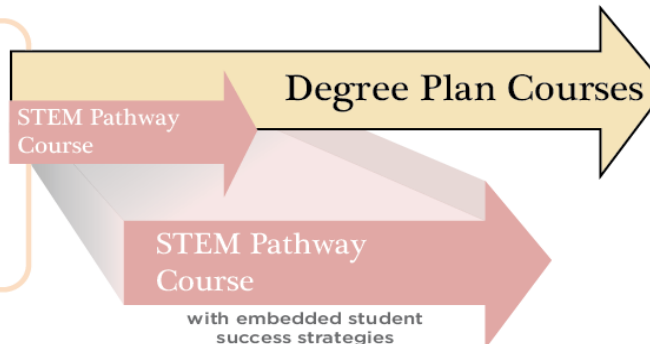
QUANTITATIVE REASONING PATHWAY is designed for students pursuing a field of study in which general education math is a requirement. These fields include majors in:

- Communications
- Graphic Design
- Paralegal



STEM-PREP PATHWAY is designed for students seeking a STEM or mathematics-intensive major in fields including:

- Petroleum Engineering
- Computer Science
- Chemistry



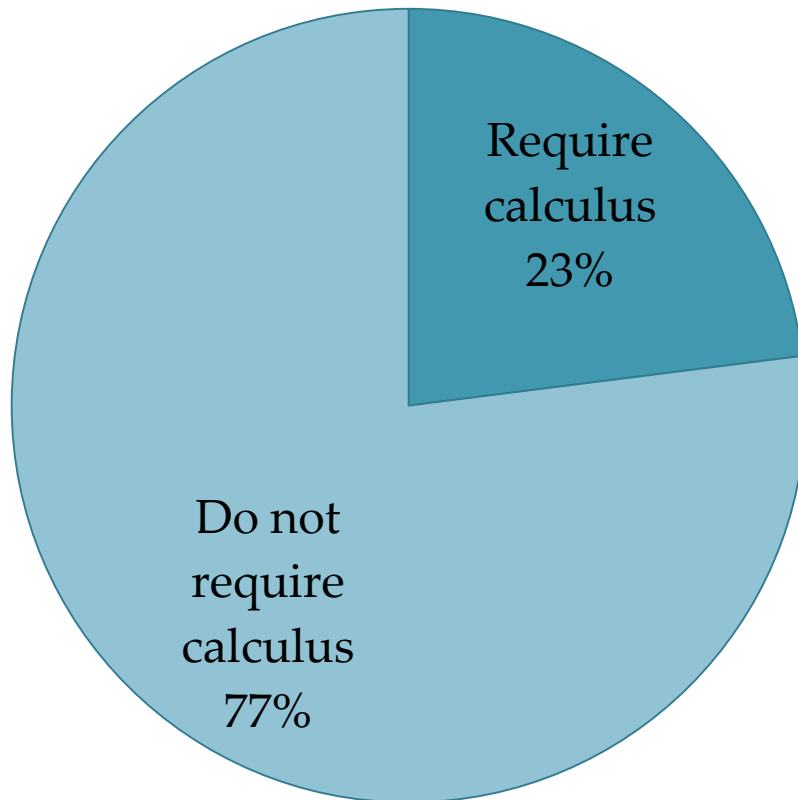
college completion goals



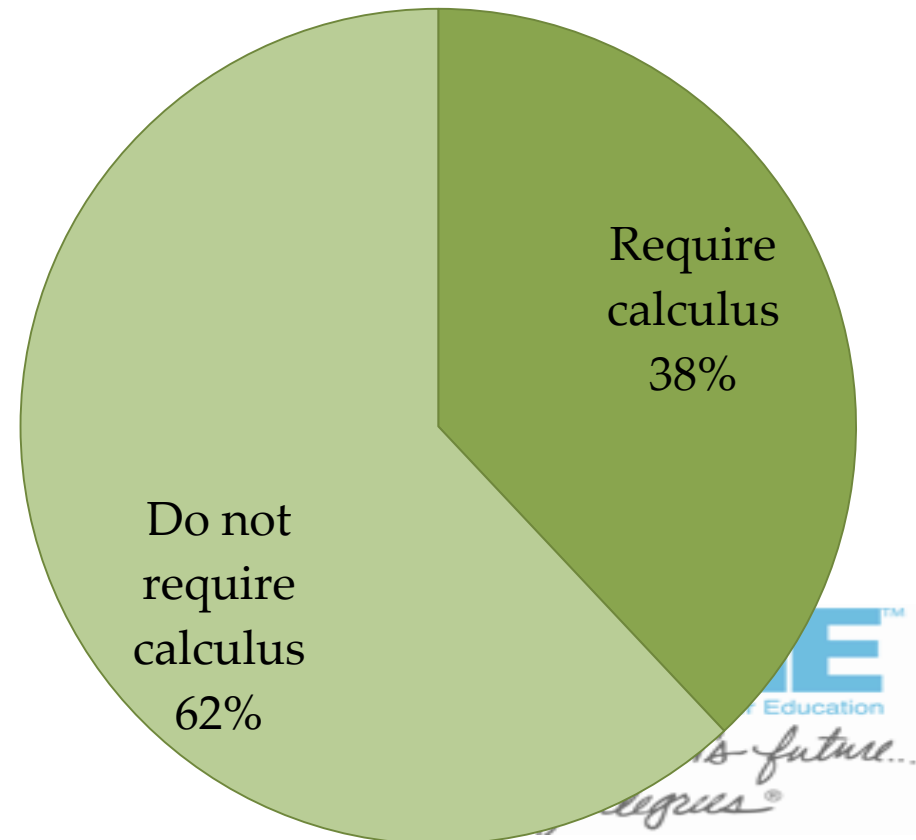
The Charles A. Dana Center
at the University of Texas at Austin

What is the “right math”?

Associate's Degrees Awarded

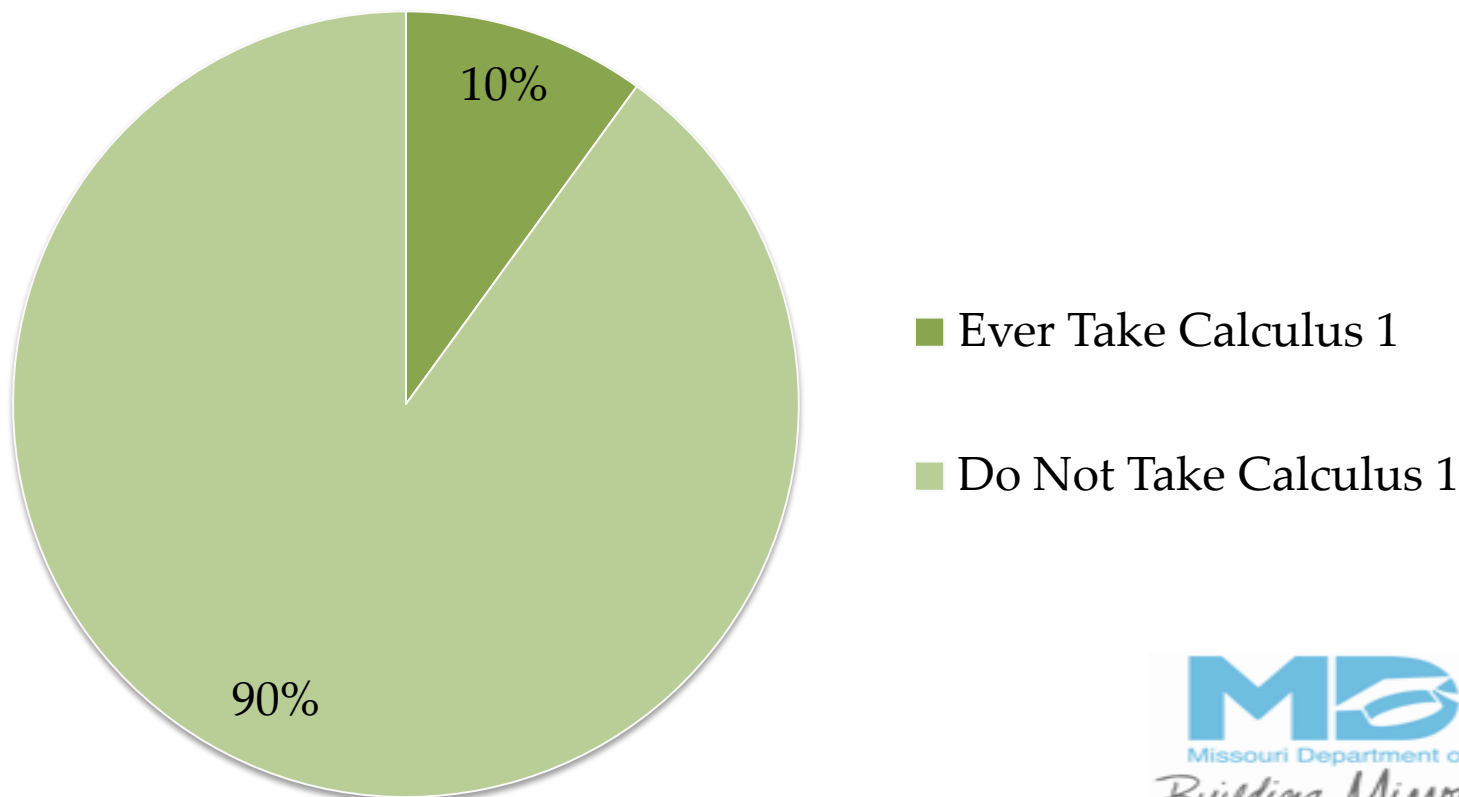


Bachelor's Degrees Awarded



What is the “right math”?

Students Who Take College Algebra



Questions???

More Questions or Comments

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